

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference GP059113	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/KR2004/003160	International filing date ( <i>day/month/year</i> ) 02 December 2004 (02.12.2004)	Priority date ( <i>day/month/year</i> ) 02 December 2003 (02.12.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant LG-NORTEL CO., LTD.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 07 June 2006 (07.06.2006)</td> </tr> <tr> <td style="padding: 5px;">Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Philippe Becamel</div></td> </tr> <tr> <td style="padding: 5px;">Telephone No. +41 22 338 70 90</td> </tr> </table>	Date of issuance of this report 07 June 2006 (07.06.2006)	Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Philippe Becamel</div>	Telephone No. +41 22 338 70 90
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# PATENT COOPERATION TREATY

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REC'D 02 JUN 2005

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year) 31 May 2005 (31.05.2005)

Applicant's or agent's file reference  
BZ04-85-WOIC

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/KR 2004/003160

International filing date (day/month/year)  
2 December 2004 (02.12.2004)

Priority Date (day/month/year)  
2 December 2003 (02.12.2003)

International Patent Classification (IPC) or both national classification and IPC  
H04Q 7/30, 7/32, 7/00

Applicant

LG ELECTRONICS INC.

1. This opinion contains indications relating to the following items:

- ☒ Cont. No. I Basis of the opinion
- ☐ Cont. No. II Priority
- ☐ Cont. No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Cont. No. IV Lack of unity of invention
- ☒ Cont. No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Cont. No. VI Certain documents cited
- ☐ Cont. No. VII Certain defects in the international application
- ☐ Cont. No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**Continuation No. I**

**Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed.

**Continuation No. V**

**Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims 1-7	YES
	Claims ----	NO
Inventive step (IS)	Claims 1-7	YES
	Claims ----	NO
Industrial applicability (IA)	Claims 1-7	YES
	Claims ----	NO

**2. Citations and explanations:**

The following documents are cited in the search report:

D1: EP 1 146 758 A1  
D2: EP 0 946 070 A2  
D3: US 2002/0150064 A1  
D4: US 5 930 242 A  
D5: JP10065612 A (abstract)

Document D1 refers to a radio communication apparatus comprising a generator for generating a transmission power control bit according to the result of comparison of an updated reference value and a value indicating measured reception quality.

Document D2 concerns a method of controlling transmission power in cellular systems and base station apparatus. The base station compares the reception quality of the signal transmitted from the mobile station with the target reception quality and determines an increment for the transmission power of the base station based on a compared result.

The subject matter of document D3 relates to a unit for transmitting data blocks in acknowledged mode on a channel featuring a radio link with a mobile station, wherein the control means comprise means for processing the acknowledgement information received from the address unit in response to the reception of a block having the acknowledgement-control field activated, to assign a first state to the blocks of the sequence which are acknowledged by the address unit.

Document D4 discloses a method of controlling a transmitting power of a base station of a mobile communication system, said method comprising: monitoring, at said base station, a total transmitting power of said base station; comparing said total transmitting power with a predetermined value; and controlling a transmitting power of a pilot signal based on said comparing.

Document D5 refers to transmission control in terminal of cellular radio system using closed-loop control when acknowledgement packets, expressing that packets are successfully received, are available.

However, none of said documents discloses determining a power of a transmission signal transmitted via the forward-acknowledgement channel using an increment for a reference transmission power value of a boost mode in case that the packet transmission control information contains a boost operation, as recited in claim 1 of the present application.

Beyond that, none of said documents discloses a method of acknowledgement control comprising the steps of determining a boost mode threshold using an increment for a boost mode reference threshold in case of boost mode operation and deciding a presence of non-presence of acknowledgement using the threshold as recited in independent claim 5 of the present application.

Thus the subject matter of claims 1 and 5 meets the requirements of novelty and inventive step.

The subject matter of the dependent claims can be considered to be new and inventive by virtue of dependency.